REMARKS

1.   The claims require that "personal information" can be modified only upon presentation of a new set of physiological identifiers and a suitable match between at least one member in the new set and a corresponding member of a first set stored in a data base. Representative claims are claims 1, 17, 29, 30, 31, and 36. (This point was made by Mr. Sunstein during the interview.)

The references of record, specifically *Pare* and *Bianco*, do not disclose or suggest this combination and can be used effectively to reject the claims only if this element of personal information specified in the claims can be ignored. (This point was also made by Mr. Sunstein during the interview.)

SPE Trammell discussed the extent to which the claim limitation "personal information" is analogous to unpatentable printed matter because it is merely the content of the stored data set with no functional relationship to the stored data set. *In re Gulack*, 703 F.2d 1381, 217 USPQ 401 (Fed.Cir. 1983) deals with printed matter in patent claims.

It was agreed during the interview that this response should address the state of the law with respect to the weight that should be accorded to such a limitation in a patent claim.

2.   Applicants respectfully submit that the law requires consideration of a claim limitation such as the one presented here: It is well settled that the PTO must consider all claim limitations when determining patentability of an invention over prior art, and the PTO may not disregard claim limitations comprised of printed matter ("[d]ifferences between an invention and the prior art cited against it cannot be ignored merely because those differences reside in the content of the printed matter ... [t]he claim must be read as a whole" *In re Gulack*, 703 F.2d at 1384-1385). Furthermore, printed matter cases have no factual relevance where "the invention as defined by the claims *requires* that the information be processed not by the mind but by a machine, the computer." *In re*

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Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed.Cir. 1994) citing *In re Bernhart*, 417 F.2d 1395, 163 USPQ 611 (CCPA 1969). Lowry's invention was directed toward the storage, use, and management of information residing in a memory. The *Lowry* court found that it was improper to deny patentable weight to data structure limitations on "printed matter" grounds, specifically where the pending claims do not merely claim the information content of a memory, but instead depend functionally on that information content (*In re Lowry*, 32 F.2d at 1583). A copy of *In re Lowry* is attached for the Examiner's convenience.

In the present invention as claimed, there is a distinction between different types of information stored in a data set, and the different types of information are used and management differently. Specifically, in the pending claims, the personal information is prevented from being modified unless and until a suitable physiological identifier is presented. Both the personal information and the physiological identifier are functionally related since they normally pertain to the same person. Thus, there is a functional relationship between the personal information stored in the data set and the way the personal information is used and managed. The present invention does not merely claim the contents of a memory, but instead claims how the contents of the memory are used and managed. The PTO must give weight to the claim limitation relating to "personal information," which clearly distinguishes the present invention as claimed over the prior art of record.

3.   The Examiner rejected claims 1-50 under 35 U.S.C. 103(a) as being unpatentable over Pare Jr. et al. (U.S. Patent No. 6,154,879) and further in view of Bianco et al. (U.S. Patent No. 6, 256, 737) and Ginter et al. (U.S. Patent No. 6,185,683), hereinafter "Pare," "Bianco," and "Ginter," respectively.

Applicants respectfully submit that the pending claims are patentable over Pare, Bianco, and Ginter.

Various embodiments of the present invention provide for a user-maintained personal information registration system. Each user provides

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personal information and physiological identifiers, and the personal information and representations of the physiological identifiers are stored in a data set in a database. Integrity of the personal information is maintained by permitting modification of a particular user's personal information only by that user. This restriction is enforced through the use of physiological identifiers (often called "biometrics"). Specifically, a person purporting to be a particular user is only permitted to modify the user's personal information in the stored data set if the subject provides a new set of physiological identifiers and it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the physiological information in the stored data set, so that the subject is authenticated as the user. Independent claims 1, 17, 29, 30, 31, 36, and 39 include this type of element in one form or another.

Neither Pare, Bianco, nor Ginter teach or otherwise suggest, alone or in combination, such a registration system in which integrity of personal information is maintained by permitting modification of a particular user's personal information only by that user, using physiological identifiers to authenticate the user.

Pare uses biometrics to control access to a user's bank account through an ATM, but does not deal with modification of personal information that might be related to the account, such as the user's name, address, and account number, to name but a few.

Bianco uses biometrics to control access to enterprises resources (such as applications and data) generally (see Col. 8, lines 9-24), but does not use biometrics to control the type of access (e.g., read/modify) for a particular resource or to specifically limit modification of a user's personal information to that user, as claimed in the subject application. Rather, Bianco is generally used to prevent a particular user from accessing sensitive information in the enterprise system, for example, by providing access to user medical information only to human resource department personnel (see Col. 20, lines 9-32) or requiring

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secondary authorization in order to access merger information (see Col. 49, line 54).

The Examiner points out that Bianco teaches a re-enrollment step in which a user's data set is updated with new physiological information (Col. 29, lines 5-10), and that this re-enrollment step can be usefully incorporated into banking and financial transaction systems such as those of Pare. This re-enrollment step generally causes modification of the physiological information in a user's data set. This re-enrollment step, however, does not involve modification of the user's personal information in the data set. Furthermore, in Bianco, modification of a user's personal information is not restricted to only the specific user, as in the present invention. The subject application discusses a similar re-enrollment step for updating the physiological information in the data set, and also discusses periodic updates of the user's personal information in the data set.

Thus, independent claims 1, 17, 29, 30, 31, 36, and 39 are allowable over Pare and Bianco. Dependent claims 2-16, 18-28, 32-35, 37, 38, and 40 are directed toward such things as additional types of user information (e.g., medical or emergency information), various types of physiological identifiers, various conditions for authenticating a subject, updating personal information, and various types of transactions. Because a dependent claim is deemed to include all of the limitations of its base claim and any intervening claim, Applicants respectfully submit that dependent claims 2-16, 18-28, 32-35, 37, 38, and 40 are also patentable over Pare and Bianco.

Claims 41 and 42 are directed toward reducing the risk of identity theft by retaining a representation of a physiological identifier provided by a subject if there is an insufficient match and providing access to the retained representation of the physiological identifier by a law enforcement official (see Page 9, line 31 through Page 10, line 7 and Page 17, lines 2-18).

Claims 43-46 are directed toward permitting a third party to view a user's personal information without having to provide physiological identifiers and
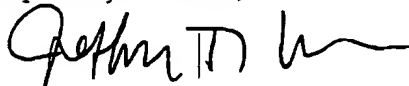
without having to be authenticated as the user (see Page 17, line 19 through Page 18, line 7).

Claims 47-50 are directed toward providing each user with a token that includes an identifier that, when presented to the database by a third party, enables the third party to access but not modify a user's information (see Page 17, line 25 through Page 18, line 1).

Because a dependent claim is deemed to include all of the limitations of its base claim and any intervening claim, Applicants respectfully submit that dependent new claims 41-50 are patentable over Pare, Bianco, and Ginter.

4. Claims 1-50 are pending in this application. All pending claims are believed to be in a form suitable for allowance. Therefore, the application is believed to be in a condition for allowance. The Applicant respectfully requests early allowance of the application. The Applicant requests that the Examiner contact the undersigned, Jeffrey T. Klayman, if it will assist further examination of this application.

Respectfully submitted,

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32 F.3d 1579
63 USLW 2184, 32 U.S.P.Q.2d 1031
(Cite as: 32 F.3d 1579)

H

United States Court of Appeals,
Federal Circuit.

In re Edward S. LOWRY (Serial No. 07/181,105).

No. 93-1558.

Aug. 26, 1994.
Rehearing Denied; Suggestion for Rehearing In Banc
Declined Dec. 19, 1994.

Inventor of computer memory storage system appealed the rejection of claims in patent application by Patent and Trademark Office Board of Patent Appeals and Interferences. The Court of Appeals, Rader, Circuit Judge, held that: (1) claims disclosed were not analogous to **printed matter**, and (2) claims were not disclosed, anticipated, or made obvious by prior art.

Reversed.

West Headnotes

[1] Patents ☞324.5
291k324.5 Most Cited Cases

Court of Appeals for the Federal Circuit reviews de novo the determinations of obviousness made by the United States Patent and Trademark Office Board of Patent Appeals and Interferences; but reviews factual findings underlying obviousness determination for clear error.

[2] Patents ☞324.55(2)
291k324.55(2) Most Cited Cases

Determination made by United States Patent and Trademark Office Board of Patent Appeals and Interferences, as to whether prior art reference anticipates claimed invention, is question of fact reviewed under clearly erroneous standard by Court of Appeals for the Federal Circuit.

[3] Patents ☞101(3)
291k101(3) Most Cited Cases

Patent and Trademark Office (PTO) must consider all claim limitations when determining **patentability** of invention over prior art, and PTO may not disregard claim limitations comprised of **printed matter**.

[4] Patents ☞5
291k5 Most Cited Cases

Claims for computer memory data structure comprising a plurality of attribute data objects were not analogous to unpatentable **printed matter**, where inventor's claims did not claim merely the information content of memory or underlying data in database, but claims dictated how application programs manage information, defined functional characteristics of the computer memory, and required specific electronic structural elements which imparted physical organization on information stored in memory, and where data structures claimed were specific electrical or magnetic structural elements in a memory. 35 U.S.C.A. §§ 102, 103.

[5] Patents ☞32
291k32 Most Cited Cases

As part of its burden to establish prima facie case of obviousness, burden of establishing absence of novel, nonobvious functional relationship rests with Patent and Trademark Office.

[6] Patents ☞16.14
291k16.14 Most Cited Cases

[6] Patents ☞50.1
291k50.1 Most Cited Cases

[6] Patents ☞77
291k77 Most Cited Cases

Claims for computer memory data structure comprising a plurality of attribute data objects were not obvious, anticipated, or disclosed by prior art, even though prior art disclosed database management system containing an active data dictionary that user could access and modify, where claims described new and nonobvious functional relationship of data in computer memory, dictating how application programs manage information, consisting of an organization of information made up of attribute data objects stored in memory, in hierarchical correlation with other attribute data objects in pyramidal structure, combining both functionally and structurally expressive characteristics. 35 U.S.C.A. § 102.

Patents ☞328(2)
291k328(2) Most Cited Cases

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Page 3

4,774,661. Cited as prior art.

Patents 🗝 328(2)
291k328(2) Most Cited Cases

4,774,661. Cited as prior.
*1580 Barry N. Young, Digital Equip. Corp., of
Maynard, MA, argued for appellant. With him on
the brief was Denis G. Maloney.

Lee E. Barrett, Associate Sol., Office of the Sol., of
Arlington, VA, argued for appellee. With him on the
brief were Fred E. McKelvey, Sol. and Murriel E.
Crawford, Associate Sol.

Before RICH, Circuit Judge. SKELTON, Senior
Circuit Judge, and RADER, Circuit Judge.

RADER, Circuit Judge.

Edward S. Lowry appeals the U.S. Patent and
Trademark Office Board of Patent Appeals and
Interferences' rejection of all claims in Patent
Application Serial No. 07/181,105. On July 30,
1993, the Board reversed the rejection of claims 1
through 5 under 35 U.S.C. § 101 (1988). The Board
also affirmed the rejection of claims 1 through 19
under 35 U.S.C. § 103 (1988) and claims 20 through
29 under 35 U.S.C. § 102(e) (1988). This court
reverses.

BACKGROUND

Lowry's patent application--"Data Processing
System Having a Data Structure with a Single,
Simple Primitive"--relates to the storage, use, and
management of information residing in a memory.
The PTO does not dispute the features and
advantages of Lowry's claimed invention. The
invention provides an efficient, flexible method of
organizing stored data in a computer memory.

A memory stores data according to a particular order
or arrangement. Application programs use stored
data to perform specified functions. A data model
provides the framework for organizing and
representing information used by an application
program. Data models define permissible data
structures-- organizational structures imposed upon
the data used by the application program--compatible
with particular data processing systems. Data
structures are the physical implementation of a data

model's organization of the data. Data structures are
often shared by more than one application program.

The prior art contains data models and data
structures. Prior art data models are generally one of
two kinds: functionally expressive or structurally
expressive data models. Functionally expressive
data models enable complex nested operations using
large blocks of data. These data models, however,
are limited to a narrow class of applications and
generally require more complex interfaces to
functionality. Structurally expressive data models,
on the other hand, define more varied data structures
capable of representing accurately complex
information. These data models, however, make
complex nested operations on large blocks of data
quite difficult.

Lowry's invention seeks to optimize both structural
and functional expressiveness. Lowry discloses a
data structure accessible by many different
application programs. Lowry's data structure is
based upon the "Attributive data model." The
Attributive data model represents complex
information in terms of attributes and relationships
between attributes. According to Lowry's
specification, "[a]n attribute expresses the idea that
one thing is attributed to another thing." Thus, the
Attributive data model capitalizes on the concept that
a database is a collection of attributions, whereby
information is represented in terms of its
characteristics and relationships to other information.

In accordance with the Attributive data model,
Lowry's data structure comprises a plurality of
attribute data objects (ADOs) stored in memory. An
ADO is a single primitive data element "compris[ing]
sequences of bits which are stored in the memory
*1581 as electrical (or magnetic) signals that
represent information." It contains information used
by the application program and information regarding
its relationship with other ADOs. Lowry asserts that
his data structure is functionally expressive by virtue
of its representation of information in terms of
attributes. Lowry also states that "[s]tructural
expressiveness is achieved by making that primitive
data object extremely simple and allowing for highly
unconstrained interconnections between attribute
instances."

According to the claimed invention, ADOs have
both hierarchical and non- hierarchical
interrelationships. A few specific rules govern these
relationships. Because the claimed invention uses
single ADOs governed by simple organizational

rules. Lowry asserts that it may flexibly and accurately represent complex objects and relationships. The hierarchical relationships form a conceptual pyramidal structure. Hierarchical correlations describe "holding" or "being held" relationships. An ADO can "hold" one or more other ADOs. Each ADO, however, can "be held" by only one other ADO. Thus, while capable of holding many others, an ADO can be held by only one other ADO. One ADO, called the apex ADO, holds at least one other ADO but is held by no other ADO. This apex ADO is the only ADO that lacks a being-held relationship. From the apex ADO, the hierarchical relationships fan out in a pyramidal structure.

ADOs also have non-hierarchical relationships. These are essentially "pointing" relationships between ADOs. There are two basic types of ADOs: (1) element data objects, which refer to only themselves, and (2) relation data objects, which refer to one other ADO, called a referent ADO. A referent ADO is merely an ADO that a relation data object refers to. Each ADO can be a referent ADO for more than one ADO. According to Lowry's specification, this arrangement of hierarchically and non-hierarchically related single primitive ADOs facilitates software operations such as retrieval, addition, and removal of information in the data structure.

Claims 1 through 5 claim a memory containing a stored data structure. Claim 1 is representative:

1. A memory for storing data for access by an application program being executed on a data processing system, comprising:

a data structure stored in said memory, said data structure including information resident in a database used by said application program and including:

a plurality of attribute data objects stored in said memory, each of said attribute data objects containing different information from said database;

a single holder attribute data object for each of said attribute data objects, each of said holder attribute data objects being one of said plurality of attribute data objects, a being-held relationship existing between each attribute data object and its holder attribute data object, and each of said attribute data objects having a being-held relationship with only a single other attribute data object, thereby establishing a hierarchy of said plurality of attribute data objects;

a referent attribute data object for at least one of said attribute data objects, said referent attribute data object being nonhierarchically related to a holder attribute data object for the same at least one of said attribute data objects and also being one of said plurality of attribute data objects, attribute data objects for which there exist only holder attribute data objects being called element data objects, and attribute data objects for which there also exist referent attribute data objects being called relation data objects; and

an apex data object stored in said memory and having no being-held relationship with any of said attribute data objects, however, at least one of said attribute data objects having a being-held relationship with said apex data object.

Claims 6 through 19 claim a data processing system executing an application program, *1582 containing a database, a central processing unit (CPU) means for processing the application program, and a memory means for holding the claimed data structure. Claims 20-23, 25, and 28 specify methods of accessing, creating, adding, and erasing ADOs within the data structure. Claim 24 specifies a method for creating a data structure. Claims 26, 27, and 29 claim methods of creating and erasing non-hierarchical relationships between ADOs and referent ADOs.

THE PROCEEDINGS BEFORE THE PATENT AND TRADEMARK OFFICE

The examiner rejected claims 1 through 5 under 35 U.S.C. § 101 as non-statutory subject matter. The examiner also rejected claims 1 through 19 under 35 U.S.C. § 103 as obvious in light of U.S. Patent No. 4,774,661 (Kumpati). Finally, the examiner rejected claims 20 through 29 under 35 U.S.C. § 102(e) as anticipated by Kumpati.

The Board reversed the 35 U.S.C. § 101 rejection. The Board found that claims 1 through 5, directed to a memory containing stored information, as a whole, recited an article of manufacture. The Board concluded that the invention claimed in claims 1 through 5 was statutory subject matter.

When evaluating patentability under sections 102 and 103, the Board failed to give patentable weight to the claimed data structure. The Board stated that the claims on appeal specify relationships between the ADOs stored in the memory. The Board analogized Lowry's data structure comprised of ADOs to printed matter and relied on this statement from In re Gulack, 703 F.2d 1381, 217 USPQ 401 (Fed.Cir.1983):

Where the **printed matter** is not functionally related to the substrate, the **printed matter** will not distinguish the invention from the prior art in terms of patentability. Although the **printed matter** must be considered, in that situation it may not be entitled to patentable weight.

Id. 703 F.2d at 1385.

In *Gulack,* this court concluded that "the critical question is whether there exists any new and unobvious functional relationship between the **printed matter** and the substrate." *Id.* at 1386 (footnote omitted). The Board therefore framed the question as whether a new, nonobvious functional relationship exists between the **printed matter** (data structure with ADOs) and the substrate (memory). The Board determined that Lowry did not show such a functional relationship. Thus, the Board agreed with the examiner that the data structure could not distinguish the claimed invention from the prior art. The Board held that Kumpati, disclosing a CPU using a memory and containing stored data in a data structure, rendered all claims either anticipated or obvious. Lowry appealed.

DISCUSSION

[1][2] This court reviews the Board's determination of obviousness *de novo. In re Woodruff,* 919 F.2d 1575, 1577, 16 USPQ2d 1934, 1935 (Fed.Cir.1990). This court reviews factual findings underlying the obviousness determination for clear error. *Id.* Whether a prior art reference anticipates the claimed invention is a question of fact reviewed under the clearly erroneous standard. *In re King,* 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed.Cir.1986).

[3] The Patent and Trademark Office (PTO) must consider all claim limitations when determining patentability of an invention over the prior art. *Gulack,* 703 F.2d at 1385. The PTO may not disregard claim limitations comprised of **printed matter.** *See Gulack,* 703 F.2d at 1384; *see also Diamond v. Diehr,* 450 U.S. 175, 191, 101 S.Ct. 1048, 1059, 67 L.Ed.2d 155 (1981). This court in *Gulack,* however, would not give patentable weight to **printed matter** absent a new and unobvious functional relationship between the **printed matter** and the substrate. The Board in this case determined that Lowry's data structures were analogous to **printed matter** and therefore the specific features of the constituent ADOs deserved no **patentable** weight without a functional **printed matter-substrate** relationship. Finding no such functional relationship

between the ADOs *1583 and the memory, the Board refused to consider the specific data structure limitations.

As an initial matter, this court notes that *Gulack* cautioned against a liberal use of "printed matter rejections" under section 103:

> A "**printed matter** rejection" under § 103 stands on questionable legal and logical footing. Standing alone, the description of an element of the invention as printed matter tells nothing about the differences between the invention and the prior art or about whether that invention was suggested by the prior art.... [The Court of Customs and Patent Appeals], notably weary of reiterating this point, clearly stated that **printed matter** may well constitute structural limitations upon which **patentability** can be predicated.

Gulack, 703 F.2d at 1385 n. 8. Despite this cautioning, the Board erroneously extended a **printed matter** rejection under sections 102 and 103 to a new field in this case, which involves information stored in a memory. This case, moreover, is distinguishable from the **printed matter** cases. The **printed matter** cases "dealt with claims defining as the invention certain novel arrangements of printed lines or characters, useful and intelligible only to the human mind." *In re Bernhart,* 417 F.2d 1395, 1399, 163 USPQ 611, 615 (CCPA 1969). The **printed matter** cases have no factual relevance where "the invention as defined by the claims *requires* that the information be processed not by the mind but by a machine, the computer." *Id.* (emphasis in original). Lowry's data structures, which according to Lowry greatly facilitate data management by data processing systems, are processed by a machine. Indeed, they are not accessible other than through sophisticated software systems. The **printed matter** cases have no factual relevance here.

[4] Nor are the data structures analogous to **printed matter.** Lowry's ADOs do not represent merely underlying data in a database. ADOs contain both information used by application programs and information regarding their physical interrelationships within a memory. Lowry's claims dictate how application programs manage information. Thus, Lowry's claims define functional characteristics of the memory.

Contrary to the PTO's assertion, Lowry does not claim merely the information content of a memory. Lowry's data structures, while including data resident in a database, depend only functionally on

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information content. While the information content affects the exact sequence of bits stored in accordance with Lowry's data structures, the claims require specific electronic structural elements which impart a physical organization on the information stored in memory. Lowry's invention manages information. As Lowry notes, the data structures provide increased computing efficiency.

Indeed, Lowry does not seek to patent the Attributive data model in the abstract. Nor does he seek to patent the content of information resident in a database. Rather, Lowry's data structures impose a physical organization on the data.

In Lowry's invention, the stored data adopt no physical "structure" per se. Rather, the stored data exist as a collection of bits having information about relationships between the ADOs. Yet this is the essence of electronic structure. In *Bernhart,* this court's predecessor noted:

> There is one further rationale used by both the board and the examiner, namely, that the provision of new signals to be stored by the computer does not make it a new machine, i.e. it is *structurally* the same, no matter how new, useful and unobvious the result.... To this question we say that if a machine is programmed in a certain new and unobvious way, it is physically different from the machine without that program; its memory elements are differently arranged. The fact that these physical changes are invisible to the eye should not tempt us to conclude that the machine has not been changed.

Bernhart, 417 F.2d at 1400 (emphasis added).

More than mere abstraction, the data structures are specific electrical or magnetic *1584 structural elements in a memory. According to Lowry, the data structures provide tangible benefits: data stored in accordance with the claimed data structures are more easily accessed, stored, and erased. Lowry further notes that, unlike prior art data structures, Lowry's data structures simultaneously represent complex data accurately and enable powerful nested operations. In short, Lowry's data structures are physical entities that provide increased efficiency in computer operation. They are not analogous to **printed matter.** The Board is not at liberty to ignore such limitations.

[5] Even assuming, arguendo, that data objects and data structures are analogous to **printed matter,** the Board erred in its reliance on *Gulack.* As part of its burden to establish a *prima facie* case of obviousness, see *In re Oetiker,* 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed.Cir.1992), the burden of establishing the absence of a novel, nonobvious functional relationship rests with the PTO. "If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *Id.* The PTO did not establish that the ADOs, within the context of the entire claims, lack a new and nonobvious functional relationship with the memory. The ADOs follow a particular sequence that enables more efficient data processing operations on stored data. The ADOs facilitate addition, deletion, and modification of information stored in the memory. In sum, the ADO's perform a function. *Gulack* requires no more. See *Gulack,* 703 F.2d at 1386.

[6] With the foregoing in mind, this court now turns to the specific prior art rejections. The Board rejected claims 1 through 19 under section 103 as obvious over Kumpati. The Board found that claims 20-29 were anticipated by Kumpati. Claims 1 through 19 include a memory, comprising the claimed data structure, for storing data for access by an application program. Claims 20 through 29 describe methods of performing data management operations with respect to the claimed data structure.

The Kumpati patent, entitled "Database Management System with Active Data Dictionary," discloses a database management system containing an active data dictionary that the user can access and modify. Kumpati's data dictionary contains information about the structure and usage of the data stored in the database management system.

Kumpati discloses a data model within a database management system complete with hierarchical and relational interrelationships. Kumpati further defines an "attribute" as a "function that maps an entity set or relationship set into one or more value sets." A value set, in turn, "further identifies (or defines) the entity by populating these attributes with specific items of data which define these characteristics."

Kumpati does not, however, disclose Lowry's ADOs and their specific hierarchical and non-hierarchical relationships. More specifically, Kumpati does not disclose the claimed pyramidal arrangement of hierarchically arranged ADOs, complete with apex ADO. Kumpati's relationship sets are different from Lowry's relation data objects, having non-hierarchical relationships with other ADOs. Neither are Kumpati's "attributes," performing a mapping

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function, equivalent to Lowry's ADOs, containing information used by the application program as well as information regarding its interrelationships with other ADOs.

Lowry's claimed invention involves an organization of information and its interrelationships which Kumpati neither discloses nor suggests. Kumpati also does not render Lowry's claims obvious. The Board erred in holding otherwise. Claims 1 through 19 are, as a whole, not obvious in light of Kumpati.

Because Kumpati does not contain all limitations of claims 20 through 29, the Board erred in holding these claims anticipated by Kumpati. Therefore, this court reverses the section 102 rejection of claims 20 through 29.

CONCLUSION

The Board erred by denying patentable weight to Lowry's data structure limitations. *1585 This court reverses the Board's determination that claims 1 through 19 are obvious. This court also reverses the Board's decision that claims 20 through 29 are anticipated under section 102.

REVERSED.

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FROM	Jeffrey T. Klayman	**PAGES**	16 (INCLUDING THIS SHEET)
	Reg. No. 39,250		
PHONE	617-443-9292	**DATE**	6/13/2003
RE	Patent Application for **Apparatus and Method for Authenticated Multi-User Personal Information Database**		
OUR FILE	2308/102 **YOUR FILE** Application No. 09/448,722		

COMMENTS

Please see attached.

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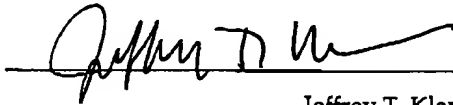
Applicants: Sunstein et al.   Atty Dkt: 2308/102
Serial No.: 09/448,722   Art Unit: 3621
Date Filed: November 24, 1999   Examiner: James Reagan
Invention: APPARATUS AND METHOD FOR AUTHENTICATED
             MULTI-USER PERSONAL INFORMATION DATABASE

Attention: Examiner James A. Reagan
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being transmitted by facsimile to the Patent and Trademark Office to the attention of Examiner James A. Reagan of Art Unit 3621 at (703) 305-7687 on June 13, 2003:

Office action response, copy of *In re Lowry*, and transmittals for filing

_____
                        Jeffrey T. Klayman

256104

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Sunstein et al.   Atty Dkt: 2308/102
Serial No.:   09/448,722   Art Unit: 3621
Date Filed: November 24, 1999   Examiner: James Reagan
Invention: APPARATUS AND METHOD FOR AUTHENTICATED
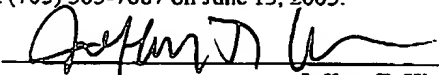   MULTI-USER PERSONAL INFORMATION DATABASE

Attention: Examiner James A. Reagan
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TRANSMITTAL

1.   Transmitted herewith is a response for the above-referenced application.

2.   Applicant is a small entity. A statement was already filed.

3.   The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply. Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition of extension of time.

4.   Applicant believes that no fees for additional claims are required.

5.   If an additional fee is required, please charge Account No. 19-4972.

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